

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in this patent application:

Claims 1 to 14 (canceled).

15. (new) A method for treating a fabric, including de-sized fabrics and previously bleached hydrophilic fabrics, wherein the fabric includes threads oriented in a selected machine direction, wherein the threads oriented in the selected machine direction are made of natural or artificial cellulose fibers, and wherein the method comprises the steps of:

applying a metal peroxide to the fabric so that the fabric is impregnated with the metal peroxide, while leaving the fabric free and without tension in the selected machine direction, for a period of time necessary for swelling of the fibers oriented in the selected machine direction and for modification of the fibers;

passing the impregnated fabric in air, while leaving the fabric relaxed and without tension in the selected machine direction, swelling the threads oriented in the selected machine direction and causing the threads to assume a spring shape, after shrinkage,

at least one rinsing of the fabric;

at least one washing of the fabric; and

at least one squeezing of the fabric.

16. (new) The method of claim 15 wherein the selected machine direction is a weft or a warp.

17. (new) The method of claim 15 wherein the metal peroxide is caustic soda at 14 to 25° Baumé.

18. (new) The method of claim 17 wherein the metal peroxide is in alkaline contact with the fabric for a period of time less than 5 minutes.

19. (new) The method of claim 15 which, following the impregnation, further includes at least one vigorous squeezing of the fabric, followed by the relaxation of the fabric passing in air.

20. (new) The method of claim 15 wherein the threads oriented in the selected machine direction are formed of artificial fibers.

21. (new) The method of claim 20 wherein the threads oriented in the selected machine direction are formed of Tencel®.

22. (new) The method of claim 15 wherein the threads oriented in the selected machine direction are formed of natural

fibers.

23. (new) The method of claim 22 wherein the threads oriented in the selected machine direction are formed of linen.

24. (new) The method of claim 15 wherein the fabric has a construction that allows the threads oriented in the selected machine direction to swell.

25. (withdrawn-new) A machine for treating a fabric using the treatment method of claim 15 and which successively comprises:

an impregnation station including a tank containing a metal peroxide;

at least a first squeezing station;

at least a first relaxation station;

at least one washing station;

a final squeezing station;

a rolling-up station; and

controls for regulating a speed of progress of the fabric through the machine, for managing the duration of the impregnation with caustic soda and the duration of the relaxation in air.

26. (withdrawn-new) The machine of claim 25 which further includes a direction-changing roller following the

first relaxation station.

27. (withdrawn-new) The machine of claim 26 wherein the direction-changing roller is located in a tank containing the metal peroxide.

28. (withdrawn-new) The machine of claim 25 which further includes a second squeezing station following the first relaxation station.

29. (withdrawn-new) The machine of claim 28 which further includes a second relaxation station following the second squeezing station.

30. (withdrawn-new) The machine of claim 29 which further includes a rinsing station following the second relaxation station.

31. (withdrawn-new) A cellulose-based fabric having threads in a selected machine direction which are comprised of cellulose fibers that are not naturally elastic, and which are rendered elastic by impregnation with a metal peroxide while leaving the fabric free and without tension in the selected machine direction to modify the cellulose and give the threads shape memory.

32. (withdrawn-new) The cellulose-based fabric of claim 31 wherein weft threads are rendered elastic by the impregnation with the metal peroxide, and which further includes a straight warp which is tensed, so that the weft threads are undulated and fixed in a spring state.

33. (withdrawn-new) The cellulose-based fabric of claim 31 wherein warp threads are rendered elastic by the impregnation with the metal peroxide, and which further includes a straight weft which is tensed, so that the warp threads are undulated and fixed in a spring state.

34. (withdrawn-new) The cellulose-based fabric of claim 31 which is obtained using the method of claim 15.